

Amendments to the Drawings:

Amendments to Figures 4-7 to add the legend "Prior Art" are submitted
for Examiner approval on the attached Replacement Sheets.

REMARKS

Claims 1-5 were examined in the Office Action mailed October 20, 2005.

The pending objections and rejections include:

- An objection to the Title as not descriptive.
- An objection to Figures 4-7 as not labeled as illustrating prior art.
- Rejection of claims 1-5 as anticipated under 35 U.S.C. § 102(b) by Japanese patent document JP 11-065397 (“Kouchi”).

1. Title Objection: In response to the Title objection, the Applicant has amended the Title to read: “Image Forming Apparatus With Image Transfer Belt Stabilization.” Withdrawal of the pending Title objection is respectfully requested.

2. Drawing Objection: The Applicant is requesting Examiner approval of the attached replacement drawing sheets, in which claims 4-7 are labeled “Prior Art.”

3. The Amended Claims Are Patentable Over Kouchi.

The Applicant respectfully traverses the pending rejection of claims 1-5 as anticipated by Kouchi on the grounds that this reference fails to disclose all the features of the present invention recited in the claims, as amended.

The Applicant has amended claim 1 to more specifically recite two features of the present invention: (i) the location of the image detecting means “at a position below and facing the belt member” with the contact member “contacting an upper, inside surface of the belt member at the position facing said image detecting means”; and (ii) the location of these components in a section of the belt which is essentially linear (“the belt being approximately

linear in shape between said driving roller and follower roller"). See, e.g., Fig. 1
(straight belt section between rollers 46, 48; contact member 23 above belt 45
and image detector 21).

These features both contribute to more stable and reliable operation of the imaging apparatus. The arrangement disclosed in Kouchi (in which the roller 21 is located under the belt, and the roller and sensor 4 are located at a near right-angle belt direction change), is susceptible to decreased imaging accuracy over time. Foreign matter inside the casing can adhere to, and build up on, the surface of the roller due to the belt friction and relatively high pressure applied by the belt as it wraps around the roller during the direction change. The resulting variation in roller thickness introduces variations in belt-to-sensor distance, thereby degrading the accuracy of the image sensing.

In contrast, the present invention avoids these problems by locating its contact member at "an upper, inside surface of the belt member" away from foreign matter sources (such as Kouchi's immediately upstream production drums 10), and by locating the contact member and the image detector in a section of the belt which is "approximately linear in shape between said driving roller and follower roller," such that forces applied by the belt which might cause foreign matter to adhere to the contact member are minimized. This location also helps minimize the effect of longitudinal and lateral speed variations on imaging accuracy. *See, e.g., Fig. 1* (location of member 23 and image detector 21 help minimize belt "flapping" transverse to the belt travel direction, and supports the belt in a manner which minimizes local speed variations along the

travel direction (unlike the Kouchi belt, which undergoes a significant deformation and direction change as it passes around roller 21 and is positioned in a location which cannot dampen lateral belt oscillations). Kouchi therefore fails to disclose (or suggest) an image forming apparatus with claim 1's belt member arrangements, and in particular "a belt being approximately linear in shape between said driving roller and follower roller," with image detecting means" located at a position below and facing the belt member" and a contact member "contacting an upper, inside surface of the belt member at the position facing said image detecting mean.

Because Kouchi does not disclose the features of the present invention now recited in claims 1-5, the amended claims are patentable over this reference under § 102(b). Reconsideration and withdrawal of the pending rejections is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, the Applicant respectfully submits that claims 1-5 are in condition for allowance. Early and favorable consideration, and issuance of a Notice of Allowance for claims 1-5, is respectfully requested.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and

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please charge any deficiency in fees or credit any overpayments to Deposit
Account No. 05-1323 (Docket #100689.53976US).

Respectfully submitted,

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